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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,362	11/13/2001	Maged E. Beshai	14880ROUS01U	7035

34845 7590 03/15/2006

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EXAMINER
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CHO, HONG SOL

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/054,362	Applicant(s) BESHA ET AL.	
	Examiner Hong Cho	Art Unit 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-28 and 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 and 20-32 is/are allowed.
- 6) ☒ Claim(s) 10-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

1. The following is in response to the amendment filed on 1/3/2006. Claims 29-31 have been cancelled. Claims 1-28 and 32 are pending in this application.

***Claim Objections***

2. Claim 10 is objected to because of the following informalities:

Re claim 10, line 6, "said designated period" should read - - said designated schedule period - - .

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 10-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Xiong et al (USPUB 20020118421), hereinafter referred to as Xiong.

Re claim 10, Xiong discloses an optical switch transmitting data bursts from input ports to output ports (*in a bufferless space switch having a plurality of burst-mode input ports and a plurality of output ports*, figure 1b, element 24; paragraph [0050], lines 10-11). Xiong discloses configuring an optical switch matrix periodically over one slot period (*determining a schedule for switching data bursts over a designated schedule period*, paragraph [0069], lines 1-3) and using the time slot for switching data bursts (*repetitively employing a schedule for switching data bursts during  $m$  consecutive periods and each of consecutive periods is equal to the designated period*, paragraph [0069], lines 7-9).

Re claim 11, Xiong discloses switching data bursts in multiple of slots (*setting  $m$  to exceed the ratio of the time required to compute said schedule and said designated schedule period  $T$* , paragraph [0068], lines 8-10).

Re claim 12, Xiong discloses a configuring period being a multiple of slots (paragraph [0069], line 4).

Re claim 13, Xiong discloses generating a schedule periodically (*generating a schedule for a succession of bursts generated over a period  $T$* , paragraph [0069], lines 1-3).

Re claim 14, Xiong discloses inherently generating continuous bursts periodically in time slots with a given number of bits (*generating a succession of bursts according to bitrate allocations for burst streams to be switched from a burst-mode input port to an output port*).

Re claim 15, Xiong discloses synchronizing bitrate allocations periodically in every slot time for slotted transmission (*refreshing bitrate allocations periodically every  $m \times T$  interval*, paragraph [0068], lines 13-15).

Re claim 16, Xiong discloses an optical switch transmitting data bursts from input ports to output ports (*in a bufferless space switch having a plurality of burst-mode input ports and a plurality of output ports*, figure 1b, element 24; paragraph [0050], lines 10-11). Xiong discloses configuring an optical switch matrix periodically over one slot period (*determining a schedule for switching data bursts over each of successive time intervals, each time interval having a duration  $T$* , paragraph [0069], lines 1-5) and using a period of a multiple of slots for switching data bursts (*setting a computation period for each of successive time intervals to an integer multiple  $m$  of the interval  $T$* , paragraph [0069]). Xiong discloses parallel scheduling of data bursts (*computing  $m$  successive schedules concurrently*, paragraph [0069], line 1 and lines 4-5).

Re claim 17, Xiong discloses switching data bursts in multiple of slots (*setting  $m$  to exceed the time required to compute said schedule for each time interval  $T$  divided by the time interval  $T$* , paragraph [0068], lines 8-10).

Re claim 18, Xiong discloses parallel scheduling of data bursts (*operating at least  $m$  scheduling devices concurrently*, paragraph [0069], line 1 and lines 4-5).

Re claim 19, Xiong discloses computing a schedule based on information in a burst header packet generated for slotted transmission (*computing a schedule for burst descriptors generated according to bitrate allocations for each pair of burst-mode input port and output port*, paragraph [0064], lines 1-6) and synchronizing bitrate allocations

periodically in every slot time for slotted transmission (*refreshing bitrate allocations at every  $T$  interval*).

***Allowable Subject Matter***

5. Claims 1-9 and 20-32 are allowed.

***Response to Arguments***

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3088.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hc

Hong Cho  
Patent Examiner  
3/9/2006



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